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Amendment to the Claims:

Please amend the claims as follows:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claims 1 to 16 (canceled)

Claim 17 (currently amended): An isolated or recombinant polypeptide enzyme comprising an amino acid sequence which is at least 70% identical to any one of SEQ ID NOS: 25-32 when aligned using the BLASTP program of the National Center for Biotechnology Information, wherein the enzyme has transaminase or aminotransferase activity having transaminase or aminotransferase activity and having at least 70% sequence identity to sequence as set forth in

SEQ ID NO:25, wherein the aminotransferase activity comprises an aspartate transaminase activity;

SEQ ID NO:26, wherein the aminotransferase activity comprises an aspartate transaminase activity;

SEQ ID NO:27, wherein the aminotransferase activity comprises an adenosyl-8-amino-7-oxononanoate aminotransferase activity;

SEQ ID NO:28, and the aminotransferase activity comprises an acetylornithine aminotransferase activity;

SEQ ID NO:29, wherein the aminotransferase activity comprises an aspartate aminotransferase activity;

SEQ ID NO:30, wherein the aminotransferase activity comprises a glucosamine:fructose-6-phosphate aminotransferase activity;

SEQ ID NO:31, wherein the aminotransferase activity comprises a histidinol-phosphate aminotransferase activity; or

SEQ ID NO:32, wherein the aminotransferase activity comprises a branched chain aminotransferase activity.

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Claim 18 (currently amended): A method for transferring an amino group from an amino acid to an  $\alpha$ -keto acid comprising:

contacting an amino acid in the presence of an  $\alpha$ -keto acid with a polypeptide as set forth in claim 17 under conditions wherein the polypeptides catalyzes the transfer of an amino group from the amino acid to the  $\alpha$ -keto acid, ~~an isolated enzyme selected from the group consisting of an enzyme that has an amino acid sequence which is at least 70% identical to any one of SEQ ID NOS: 25-32 when aligned using the BLASTP program of the National Center for Biotechnology Information wherein the enzyme has transaminase or aminotransferase activity;~~ and

thereby transferring an amino group from the amino acid to the  $\alpha$ -keto acid.

Claim 19 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 17, wherein the amino acid sequence is encoded by a nucleic acid having [[of the isolated enzyme is]] at least 80% [[identical]] sequence identity to a nucleic acid encoding to any one of SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31 or SEQ ID NO:32.

Claim 20 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 17, wherein the amino acid sequence has [[of the isolated enzyme is]] at least 90% sequence identity [[identical]].

Claim 21 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 20 [[17]], wherein the amino acid sequence has [[of the isolated enzyme is]] at least 95% sequence identity [[identical]].

Claim 22 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 17 [[21]], wherein the isolated polypeptide [[enzyme]] is a microbial enzyme.

Claim 23 (currently amended): The method of claim 18, wherein the amino acid

sequence has [[of the isolated enzyme is]] at least 80% sequence identity [[identical]].

Claim 24 (currently amended): The method of claim 23 [[18]], wherein the amino acid sequence has [[of the isolated enzyme is]] at least 90% sequence identity [[identical]].

Claim 25 (currently amended): The method of claim 23 [[18]], wherein the amino acid sequence has [[of the isolated enzyme is]] at least 95% sequence identity [[identical]].

Claim 26 (currently amended): The method of claim 18 [[25]], wherein the isolated polypeptide [[enzyme]] is a microbial enzyme.

Claim 27 (currently amended): The method of claim 18 [[25]], wherein the polypeptide [[isolated enzyme]] converts up to [[about]] 400  $\mu$ moles of  $\alpha$ -keto acid per minute per mg of the enzyme.

Claim 28 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 17, wherein the amino acid sequence has ~~of the isolated enzyme is~~ at least 70% sequence identity [[identical]] to SEQ ID NO:25 and the polypeptide [[enzyme]] has aspartate transaminase A activity.

Claim 29 (currently amended): The method of claim 18, wherein the amino acid sequence has ~~of the isolated enzyme is~~ at least 70% sequence identity [[identical]] to SEQ ID NO:25 and the polypeptide [[enzyme]] has aspartate transaminase A activity.

Claim 30 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 17, wherein the amino acid sequence has ~~of the isolated enzyme is~~ at least 70% sequence identity [[identical]] to SEQ ID NO:26 and the polypeptide [[enzyme]] has aspartate aminotransferase B activity.

Claim 31 (currently amended): The isolated or recombinant polypeptide

[[enzyme]] of claim 17, wherein the amino acid sequence has ~~of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:27 and the polypeptide [[enzyme]] has adenosyl-8-amino-7-oxononanoate aminotransferase activity.

Claim 32 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 17, wherein the amino acid sequence has ~~of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:28 and the polypeptide [[enzyme]] has acetylmethionine aminotransferase activity.

Claim 33 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 17, wherein the amino acid sequence has ~~of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:29 and the polypeptide [[enzyme]] has aspartate aminotransferase activity.

Claim 34 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 17, wherein the amino acid sequence has ~~of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:30 and the polypeptide [[enzyme]] has glucosamine:fructose-6-phosphate aminotransferase activity.

Claim 35 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 17, wherein the amino acid sequence has ~~of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:31 and the polypeptide [[enzyme]] has histidinol-phosphate aminotransferase activity.

Claim 36 (currently amended): The isolated or recombinant polypeptide [[enzyme]] of claim 17, wherein the amino acid sequence has ~~of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:32 and the polypeptide [[enzyme]] has branched chain aminotransferase activity.

Claim 37 (currently amended): The method of claim 18, wherein the amino acid

sequence ~~has of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:26 and the polypeptide [[enzyme]] has aspartate aminotransferase B activity.

Claim 38 (currently amended): The method of claim 18, wherein the amino acid sequence ~~has of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:27 and the polypeptide [[enzyme]] has adenosyl-8-amino-7-oxononanoate aminotransferase activity.

Claim 39 (currently amended): The method of claim 18, wherein the amino acid sequence ~~has of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:28 and the polypeptide [[enzyme]] has acetylornithine aminotransferase activity.

Claim 40 (currently amended): The method of claim 18, wherein the amino acid sequence ~~has of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:29 and the polypeptide [[enzyme]] has aspartate aminotransferase activity.

Claim 41 (currently amended): The method of claim 18, wherein the amino acid sequence ~~has of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:30 and the polypeptide [[enzyme]] has glucosamine:fructose-6-phosphate aminotransferase activity.

Claim 42 (currently amended): The method of claim 18, wherein the amino acid sequence ~~has of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:31 and the polypeptide [[enzyme]] has histidinol-phosphate aminotransferase activity.

Claim 43 (currently amended): The method of claim 18, wherein the amino acid sequence ~~has of the isolated enzyme~~ is at least 70% sequence identity [[identical]] to SEQ ID NO:32 and the polypeptide [[enzyme]] has branched chain aminotransferase activity.

Claim 44 (new): The isolated or recombinant polypeptide of claim 17, wherein

the sequence identity is determined using a BLASTN program.

Claim 45 (new): The method of claim 18, wherein the sequence identity is determined using a BLASTN program.

Claim 46 (new): The isolated or recombinant polypeptide of claim 17, wherein the amino acid sequence is encoded by a nucleic acid having at least 90% sequence identity to a nucleic acid encoding to any one of SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31 or SEQ ID NO:32.

Claim 47 (new): The isolated or recombinant polypeptide of claim 17, wherein the amino acid sequence is encoded by a nucleic acid having at least 95% sequence identity to a nucleic acid encoding to any one of SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31 or SEQ ID NO:32.

Claim 48 (new): An isolated or recombinant polypeptide having transaminase or aminotransferase activity and having at least 70% sequence identity to sequence as set forth in SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31 or SEQ ID NO:32, wherein the transaminase or aminotransferase activity comprises an aspartate transaminase activity, an aspartate transaminase activity, an adenosyl-8-amino-7-oxononanoate aminotransferase activity, an acetylornithine aminotransferase activity, an aspartate aminotransferase activity, a glucosamine:fructose-6-phosphate aminotransferase activity, a histidinol-phosphate aminotransferase activity, a branched chain aminotransferase activity or a combination thereof.

Claim 49 (new): An isolated or recombinant polypeptide having transaminase or aminotransferase activity and having at least 70% sequence identity to sequence as set forth in SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31 or SEQ ID NO:32.